



How Can Business Contribute to the Ethical Mining of Conflict Minerals?

Addressing Risks and Creating Benefits Locally in the Artisanal and Small-Scale Mining Sector in the Democratic Republic of the Congo

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About This Working Paper

The sourcing of tin, tantalum, tungsten, and gold (3TG) from the Democratic Republic of the Congo (DRC) and adjoining countries has gained international attention in recent years because of the role that these materials can play in financing armed groups in the world's deadliest conflict since World War II. At the same time, the extraction of 3TGs from the DRC and wider African Great Lakes Region is dominated by artisanal and small-scale mining (ASM), and the livelihood of much of the region's population depends on the existence of a thriving, sustainable 3TG supply chain.

Recent legislation (principally Section 1502 of the U.S. Dodd–Frank Act) and other initiatives have spurred companies to improve the management of their supply chains as they seek to meet new reporting requirements. However, these efforts focus specifically on conflict, while myriad other significant social and environmental opportunities and concerns at ASM sites may be overlooked. Moreover, the lack of enforcement of existing regulations and the mismanagement of how 3TGs are produced, transported, and/or traded at the ASM site level can trigger socioeconomic and environmental instability and contribute to important human rights violations.

At BSR, we see the increased attention to supply chain due diligence as creating a unique opportunity for business both along the conflict mineral supply chain and those impacted by it, such as large-scale mining (LSM) companies operating in the DRC and surrounding regions, to take action in advancing local economies in a manner that contributes to a healthy society and environment. In doing so, businesses stand to benefit through improving the sustainability and stability of their supply chains, mitigating important reputational risks, and facilitating and strengthening their process of supply chain management.

To this end, BSR has developed this working paper outlining both the opportunities and constraints that miners in the DRC face as part of the preparations for an in-person meeting in early 2014 with relevant external stakeholders to explore how companies can extend their due diligence activities on conflict minerals beyond conflict itself. Our objective is to broaden our understanding of corporate risk mitigation related to conflict minerals by highlighting the importance to business of both addressing the root causes of risks and potentially contributing to positive local sustainable development for mining communities.

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Introduction

Tremendous strides have been made in recent years to raise awareness of the ethical and sustainability concerns in sourcing so-called conflict minerals (tin, tantalum, tungsten, or gold [3TG]) from the Democratic Republic of the Congo (DRC) and the African Great Lakes region.¹ These minerals' extraction and trade may illegally finance armed groups, conflict, and related atrocities in the region. Governments, NGOs, and humanitarian activists, as well as the private sectors throughout the United States, Europe, and Africa, have built regulatory frameworks and stimulated the global market for responsibly sourced minerals. As part of this shift, major manufacturing companies whose products may contain 3TG are increasingly developing elaborate due diligence mechanisms to trace their use of these materials to their source.



We are at a critical turning point in addressing the sustainability of conflict minerals. New standards for reporting on them are being implemented and, as such, key actors along the 3TG supply chain need to meet certain requirements in order to continue to be a part of these global supply chains. A primary concern for companies sourcing 3TG has been whether revenues from mining are being used to finance violence and insurrection activities in the DRC. Companies are looking to eliminate the use of minerals that are financing conflict in order to declare their products “conflict free.”

Yet tracing minerals throughout supply chains to understand their potential connection to armed conflict is merely one step in the global endeavor to improve the ethical standing of 3TG sourcing. In the context of supply chain due diligence, regardless of whether revenues are financing militia activities, other deeply embedded sustainability issues regarding the current social, labor, and environmental standards at mine sites represent a risk to corporate operations, supply chains, and reputations. The extraction of 3TG from the Great Lakes region is dominated by artisanal and small-scale mining (ASM), a sector with an often tarnished reputation because of its generally inadequate labor standards, unsafe working conditions, prominent use of child and forced labor, and significant damage it causes to the local environment. These issues will persist even in the absence of conflict.

¹ Countries in the African Great Lakes region include Burundi, the Democratic Republic of the Congo, Kenya, Rwanda, Tanzania, and Uganda.

ASM activities, however, also represent an important livelihood to millions of Africans and, if they are performed in a just and sustainable way, can lead to positive human rights impacts and contribute to a more inclusive economy. The mining of 3TG in particular represents a significant economic activity that connects rural populations to global supply chains. By approaching concerns about 3TG sourcing with a comprehensive understanding of the development potential and broader social and environmental risks in the ASM sector, rather than looking exclusively through the lens of conflict, companies, governments, and NGOs have a unique opportunity to support the development of stable supply chains. While doing so, they can also contribute positively to the economic growth and prosperity of communities.

Multinational companies have an important leadership role to play in addressing the social and environmental challenges linked with the production and sourcing of 3TG. By looking beyond supply chain transparency and working to address some of the fundamental sustainability risks and opportunities of ASM sites producing 3TG, businesses will not only promote greater stability in their supply chains, reduce risk, and maximize company benefits, but they will also generate important community development opportunities and foster inclusive economic growth. Engaging with the ASM sector offers businesses along the conflict minerals supply chain a pioneering way to demonstrate their commitment to respecting human rights through ethical sourcing practices.

Promoting a vibrant, ethical ASM sector is not only of interest to companies along the conflict minerals supply chain. Large-scale mining (LSM) companies have long recognized the important role they can play in contributing to improving the human rights and livelihoods of the many people who depend on the ASM sector. Industry and development practitioners have recognized the establishment of a healthy, prosperous ASM sector as critical to stimulating local economic growth and alleviating poverty in many resource-rich African countries. As such, there have been numerous initiatives over the past several years to help the ASM sector develop and improve, while addressing important social and environmental concerns often associated with it.

The sourcing of 3TG from the DRC and its region thus offers a significant opportunity to support local development in mining communities. This sector's viability represents an important potential vehicle for alleviating poverty and fostering socioeconomic growth. To improve business actions aimed at developing sustainable 3TG supply chains, we must develop a deeper understanding of the opportunities and challenges associated with this type of mining. It behooves us, therefore, to explore the specific roles companies play throughout the conflict minerals supply chain, not only in supporting the development of ethical sourcing, but also contributing positively to local economic growth and prosperity.

Building upon BSR's previous work on the topic,² this working paper reviews the key opportunities and challenges facing the ASM production of 3TG. It takes a new approach to current business risks related to sourcing conflict minerals from the DRC by looking beyond the practices of supply chain traceability to highlight the ways in which global businesses could begin to address and mitigate risks at the root level.

We begin by providing an understanding of the ASM sector as it pertains to the sourcing of 3TG in order to highlight how ASM activities could foster socioeconomic development in the DRC and the Great Lakes region in Africa

² See "Going Beyond the Supply Chain in the Democratic Republic of the Congo: Responsible Multistakeholder Action on Development and Capacity-Building in Eastern DRC," BSR, February 2012, www.bsr.org/en/our-insights/report-view/going-beyond-the-supply-chain-in-the-democratic-republic-of-congo.

more generally. Against this backdrop, we then present opportunities for engagement and leadership by multinational companies and others, calling out the potential benefits of engagement to both business and local communities. We conclude by providing some recommendations for conducting a multistakeholder workshop in 2014 with the aim of securing companies' commitment to actively engage to address human rights issues, particularly child labor, on ASM sites in the DRC.

Understanding the ASM Sector

In order to understand the relevance of looking at the ASM sector as part of a broader management strategy for the conflict minerals supply chain, we must first clearly define this sector and highlight its potential benefits and challenges. This section provides an overview of the ASM sector and discusses both its potential to support inclusive economic growth and the major challenges it must overcome to achieve that goal. From here, we can then consider the opportunity for business to harness the potential of ASM in a way that improves rural livelihoods, stimulates entrepreneurship in a socially and environmentally responsible manner, and promotes local and integrated national development.

What Is ASM?

ASM has no formal definition, but it is broadly understood to refer to mining activities that are labor intensive and limited in their use of capital, mechanization, and technology. In some countries, a distinction is made between “artisanal mining,” which is purely manual and on a very small scale, and “small-scale mining,” which is more mechanized and on a larger scale or includes the presence of permanent installations. Definitions vary from country to country according to the local macroeconomic situation, geological framework, mining history, and legal conditions. Nevertheless, ASM is generally used in contrast to LSM, which usually refers to sites run by transnational companies and is both capital intensive and highly technical.

The sector has been growing over the past several years as demand for mineral resources has risen. Globally, the ASM sector exploits many kinds of minerals, ranging from diamonds and a variety of other gemstones to precious metals, such as gold and tantalite, and industrial minerals, including limestone for aggregate and agricultural purposes, clays, and many other nonmetallic minerals. It continues to make a significant contribution to global mineral extraction; it is estimated that 15–20 percent of global nonfuel mineral output worldwide is produced through ASM.³ The sector produces approximately 80 percent of all sapphires, 25 percent of all tin, 20 percent of all gold, and up to 20 percent of all diamonds.⁴

ASM operates in more than 80 countries and has become integral to the economies of many mining countries in the developing world (see Figure 1). In Bolivia, for example, 32 percent of mineral exports come from ASM, and the sector provides 85 percent of total mining employment.⁵ In some countries, ASM production equals or exceeds that of LSM. For example, in China, ASM produces 75 percent of the bauxite the country mines, and in Indonesia, ASM tin production equals that of LSM.⁶ In Brazil, small-scale miners mine 84 percent of all construction and building materials. In Ecuador and Ghana, ASM produces 65 and 27 percent of all gold, respectively.

ASM is a critical contributor to the global economy and supply chains. Production includes:

- » 15–20 percent of all minerals
- » 25 percent of tin
- » 20 percent of gold

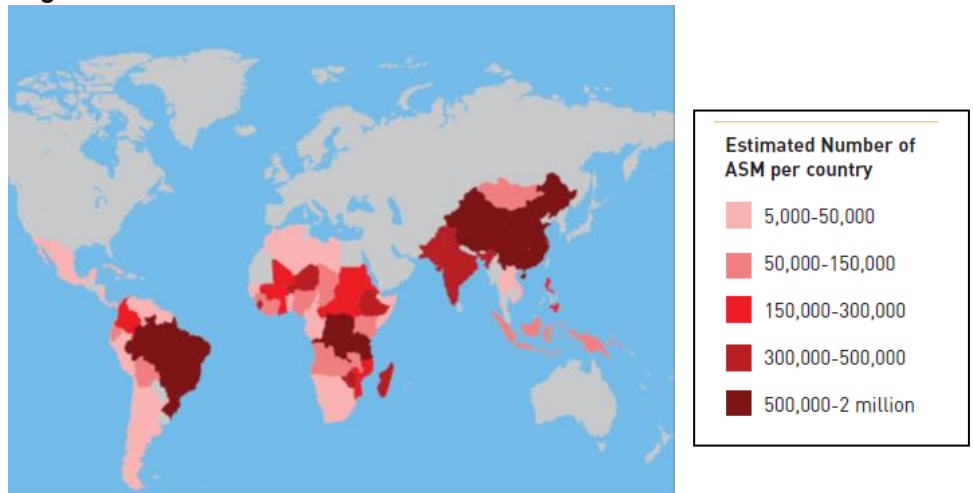
³ Villegas et al. 2012

⁴ Ibid.

⁵ ILO, 2005: 6.

⁶ MMSD, 2002: 318.

Figure 1: Artisanal and Small-Scale Miners around the World



Source: International Council on Mining and Metals (ICMM), 2005; reproduced from the World Bank's Communities and Small-Scale Mining Initiative (CASM), www.artisanalmining.org.

The political and legal framework guiding ASM varies from country to country. ASM is often thought to be linked to the informal economy and, as such, can easily be mistaken for an illegal activity. However, ASM activities in many places are in fact a legal, recognized form of mineral extraction prevalent in many mineral-rich developing countries. Indeed, as the legal status of ASM and their status in national mining policies differ from country to country, thus leading to complexities in the overall understanding of the legality and security of tenure of ASM⁷. Tapping into the sector's potential by improving productivity and sustainability performance on sites and by promoting its integration into global supply chains can only help change the often negative perceptions people have of it.

ASM Livelihoods and Opportunities

Improving ASM's environmental and social impact can support its formalization as both a key component of global supply chains and a significant source of economic opportunity for countries and communities.

ASM activities occur in some of the most remote areas in the world, where infrastructure and possibilities for other formal economic activities are limited. Because of these characteristics, ASM is increasingly recognized as playing a key role in alleviating poverty, increasing community capital, and diversifying local economies in many rural and developing regions.⁸

Compared to LSM, which is capital intensive, ASM is a labor-intensive economic activity that generates a living for many more miners and their families. Globally, ASM directly involves 20 to 30 million people, with its gold mining employing an estimated 15 million people alone.⁹ More importantly, ASM activities are believed to indirectly provide a livelihood for many times that number of people,¹⁰ most of whom live in developing countries. In the DRC, the livelihoods of as many as 8 to 10 million people depend on the mining sector, much of which is ASM.¹¹

The ASM sector offers clear opportunities for fostering socioeconomic development and alleviating poverty. If it is well-functioning, the sector serves the following roles:

⁷ For a discussion about the different legal and illegal categorizations of the ASM sector, refer to Appendix 1.

⁸ Hilson, 2002. Bryceson and Jønsson, 2013. Bourgoign, 2013.

⁹ Telmer, 2009.

¹⁰ Buxton, 2012.

¹¹ The World Bank, 2008.

- » As a reliable source of employment with higher wages than those paid for other rural livelihoods, such as forestry or agriculture, it presents rural poor people an opportunity to increase their per capita income.
- » As a labor-intensive sector, it could employ more people and thus have a broader impact throughout mining communities.
- » As a sector that often develops in extremely remote rural areas that have limited infrastructure or industrial development, ASM activities represent an important opportunity for communities to engage in formal labor and both contribute to and benefit from engagement with the global economy.

ASM occurs in some of the most remote areas in the world and involves some of the world's poorest people. Mining in these areas often constitutes the principle motor for development, often creating complementary opportunities for other local business opportunities as revenues are often reinvested in the regions.¹² ASM can generate significant local purchasing power and lead to a demand for locally produced goods and services (food, tools, equipment, housing, and infrastructure).

Because artisanal and small-scale miners earn relatively high wages compared to people pursuing other rural livelihoods, such as agriculture, forestry, or construction, working in the ASM sector is often very appealing. Plus mining developments often attract migrant and seasonal laborers. In many cases, it also represents an opportunity for employment for retrenched workers from large-scale mines. Moreover, it is estimated that women account for as much as 30 percent of the sector's workers and are involved in all activities associated with artisanal mining.¹³ The sector can serve as a meaningful way to contribute to the creation of a more inclusive economy by connecting rural populations to the broader global economy.

Considered from the perspective of poverty reduction, transforming ASM could be an important opportunity for improving conditions in rural and remote areas, especially where there are few alternative livelihoods. Thus addressing some of the fundamental sustainability challenges on ASM sites has great potential to:

- » positively impact rural poor people;
- » support many people as a labor-intensive sector;
- » develop regions that lack infrastructure; and
- » support other economic opportunities.

ASM Social and Environmental Concerns

While a well-functioning ASM sector has a recognizable potential to improve rural livelihoods and alleviate poverty, its effects on local communities are not always positive. The sector's viability is often limited by its lack of infrastructure and poor access to technology, finance, and markets.

It continues to face many social and environmental challenges that prevent it from contributing to local development in a meaningful way. In the DRC and around the world, ASM's poor labor conditions and violations of basic human rights, as well as the significant damage it can do to the local environment, have often tarnished its reputation. These challenges need to be tackled holistically if ASM is to be transformed into a means of sustainable development. The principle issues include:

¹² Hentschel et al., 2002.

¹³ Hilson, 2002.

ASM may contribute to several issues in company supply chains, including human rights violations and environmental damage.

- » Many countries **lack policy frameworks** that adequately accommodate ASM, impinging on their ability to operate. For example, the process of applying for mining rights usually favors LSM companies to the extent that ASM frequently operates without security of tenure.¹⁴ This favoritism, in turn, impacts the ability of ASM enterprises to borrow and invest. Furthermore, without formal mineral rights, small-scale miners can end up trespassing on legal concessions, thereby provoking local disputes.
- » **Environmental damage** through erosion and deforestation of protected areas, biodiversity loss, and water pollution are often associated with ASM. ASM gold mining is widely known to be one of the world's biggest sources of mercury pollution. Moreover, mining operations are often abandoned once the ore that is easily extracted is removed, and sites are rarely rehabilitated.
- » The sector often **lacks organization and access to inputs and services**. As a result, it does not receive the support it needs to address its fundamental structural challenges in order to ensure that it contributes to people's well-being and to sustainable development. This lack of access can contribute to **land use disputes**.

¹⁴ Bourgoïn, 2013.

Box 1: Child Labor and Conflict Minerals in the DRC

Child labor, in particular, is one of the most prevalent and troubling concerns related to ASM in the Great Lakes region and in the DRC in particular. Child labor is rife in the DRC. According to data gathered by the UN Children’s Fund (UNICEF), approximately 42 percent of children between ages 5 and 14 work, and in rural areas, as many as 46 percent of children work.

ASM is one of the worst forms of child labor because of the widespread and severe hazards associated with it, such as high rates of death, injury, and disease.¹ Children undertake arduous activities, such as heavy lifting, digging, ore haulage, and transport, as young as age six and begin working underground as young as age nine.² Child labor is one of a few key issues noted in the Organisation for Economic Co-operation and Development (OECD) Due Diligence Guidance for Responsible Sourcing of Minerals, as well as the recent Human Rights Watch (HRW) report on ASM in Tanzania.

Child labor can range from part-time help after school to full-time slavelike employment in the most hazardous conditions. Children can become involved in prostitution, drug and alcohol abuse, and violence. In the early 2000s, the International Labour Organization (ILO) estimated that 1 million children were artisanal miners. This number has likely increased given the threefold increase in the total number of people involved in ASM since then.

The hazardous working conditions under which ASM is carried out have a particularly negative impact on child laborers in the mines. Children are often used because they can crawl into small spaces when following the mineral veins, or they perform tasks, such as transporting ore to the mills or water. Moreover, children involved in the processing of ores are often exposed to high levels of toxins, such as mercury.

The ILO³ identifies a number of structural challenges that lead to child labor in the ASM. Low barriers to entry, minimal mechanization, and the work’s physical demands coupled with its low required education levels all make it easy to employ children. Plus access tunnels may be so small that only children can fit into them.

According to Pact⁴, the prevalence of child labor on ASM sites in the DRC provides a comprehensive overview of one of the key human rights issues facing the ASM sector more broadly. Pact’s research revealed that children are working at all points of the supply chain—with mineral extraction directly, the processing and transportation of minerals, and trading.

¹ ILO, 2005.

² MMSD, 2002: 24.

³ ILO, 2005: 2-3.

⁴ PACT, 2013.

- » **Human rights violations** present some of the more prevalent troubling concerns related to ASM in the DRC and Great Lakes region in particular. These violations include the use of **child labor** (see Box 1), inadequate labor standards, and occupational and community health and safety concerns. Miners are often subject to **hazardous working conditions** (risk of cave-ins and rockfall), long hours, exposure to toxins, inadequate sanitation facilities, and environmental contamination.
- » ASM communities often face broader **societal problems**, such as increased crime and theft, nuisance vandalism, alcohol and drug abuse, and a rise in sex-trade activities and the concomitant health risks, including the risk of contracting HIV/AIDS.

Legal Framework and ASM Certification

Both LSMs and manufacturers with ASM products in their supply chains can play a role in supporting ASM certification efforts and legal frameworks, thus supporting greater market access for environmentally and socially preferable raw materials, more responsible supply chains, and sustainable local development.

There is no international legal framework specific to ASM, and generally speaking, knowledge of ASM issues among policy makers around the world tends to be quite poor compared to their understanding of other sectors, though the political will to support ASM as an engine of development is beginning to grow.¹⁵ Where there is solid on-the-ground experience, it is often not well documented, shared, or organized. The policies developed in response to ASM rarely reflect a thorough understanding from the full range of its stakeholders, particularly from the miners and their communities, and the policies are often not properly implemented.¹⁶ When compared to the LSM sector or to sustainable development more generally, ASM has very few multistakeholder spaces where committed individuals and organizations can come together to build trust, learn, innovate, and find shared solutions to challenges.

Despite this scale of need, many development donors and programs do not engage with the sector; rather, they often perceive ASM livelihoods as undesirable and fear that engaging with this sector may perpetuate illegal or dangerous activities. As a result, ASM continues to be underfunded and neglected compared to other rural, poverty-driven activities, such as small-scale agriculture, forestry, and fisheries. All three of those were mentioned in the 2012 post-Rio+20 Future We Want vision as important contributors to sustainable development. Artisanal and small-scale miners were not mentioned at any point in that document.¹⁷

A long-standing barrier to progress is the inadequate knowledge-policy interface on ASM issues, which perpetuates weak political leadership and fuels distrust between key actors. Nevertheless, international initiatives in both sustainable development and mining are increasingly looking at ways to improve the ASM sector to harness its development potential. (See Appendix 1 for a more thorough overview of the ASM sector and relevant codes and conventions.)

In addition, there have been recent efforts to bring ASM into mainstream economic life by introducing various support programs and certification schemes. Some relevant mining codes and conventions include:

- » ICMC's [10 Principles](#)
- » [Kimberly Process](#)
- » Global Reporting Initiative's (GRI) [Mining and Metals Supplement](#)
- » ILO No. 182 [Worst Forms of Child Labour Convention](#)

In recognition of this potential, the World Bank's CASM,¹⁸ launched in 2001, sought to improve the general understanding of the sector and led the way to spur increased interest in seeing its sustainable development. CASM envisioned a positive livelihoods approach to ASM by responding to the need for cross-disciplinary solutions and improved coordination among the major stakeholders. Unfortunately, funding constraints restricted the initiative's impact and eventually led to its closure, although the World Bank continues to invest through technical assistance and capacity-building events.

In building on the past efforts of initiatives, such as CASM, and more recent initiatives, such as those of the International Institute for Environment and Development (IIED, see Box 2), business has a unique opportunity to

¹⁵ Siegel and Viega, 2009.

¹⁶ Bourgoignie, 2013.

¹⁷ United Nations, 2012.

¹⁸ See references in Appendix 1 for further information on CASM, as well as the recognition of the potential role of the ASM sector to alleviate poverty and support inclusive growth.

contribute to viable rural livelihoods through ASM in the Great Lakes region, thereby further strengthening international efforts to certify minerals as conflict free.

Box 2: Scaling Up Certification in ASM

A report published recently by the IIED as part of their Sustainable Market series discusses the outlook for sustainable development in the ASM sector and suggests that voluntary market certification schemes are part of the solution. According to the report, governments are realizing that growing demand for mineral resources continues to spur small-scale mining activities. However, ASM's frequent violations of basic human rights, exacerbation of pollution, and corruption have often tarnished its reputation. Because tense relations between mining companies and the ASM can hinder community engagement efforts, helping vulnerable and marginalized artisanal and small-scale miners achieve economic development and supporting good social and environmental practices could be mutually beneficial.

According to the report, governments, businesses, and civil society groups that are seeking to ensure the ASM sector's sustainable development should learn from market-led certification schemes, such as FairTrade and Fairmined Gold. The price premium offered to ASM groups gives them an economic incentive to invest in cleaner production techniques and local development projects, which will in turn improve the sector's social and environmental impacts. The report concludes that there are more opportunities to leverage LSM companies to capacitate ASM and integrate their products into certified supply chains.

ASM and the Conflict Mineral Supply Chain

Although conflict minerals are predominantly ASM products, companies should try to ensure that their policies to address conflict minerals do not unnecessarily restrict ASM market access.

As noted above, the ASM sector is an important contributor to global supply chains generally, particularly of conflict minerals from the DRC and the African Great Lakes region, where the production of 3TG is largely done by the ASM sector. According to a 2010 study,¹⁹ most LSM activity in the DRC remains in the prospecting, exploration, feasibility, or development stages; industrial production has yet to make a major contribution to the country's mineral production.

The ASM sector supplies the smelters that prepare raw materials for manufacturing, usually through a host of intermediaries, such as traders, exporters, and agents. Nonstate armed groups may own, control, or extort money at any point, including mines, along this chain in the region. Because of this complexity and risk "upstream" from smelters (that is, between a smelter and the mines supplying the raw material) *and* because of the comparatively small number of smelters handling these materials, companies wishing to ensure that their supply chains comply with new regulations are focused on using smelters that do not purchase material from sources that may help fund conflict. Recent efforts to create certification schemes for conflict minerals, such as the International Conference on the Great Lakes Region (ICGLR) certification process, seek to provide recognizable international standards and to reassure multinational companies sourcing these materials. However, if the mineral certification processes that have recently begun in Rwanda and the DRC are completed inadequately, multinational corporations upstream may stop purchasing minerals from the region that cannot be credibly certified as conflict free.

¹⁹ The World Bank, 2010.

Because tracing minerals through the supply chain in the ASM sector can be difficult, smelters may choose to source exclusively from larger mines. In other words, ASM sites could be increasingly excluded from global supply chains of 3TG as a result of supply chain reporting requirements and good faith efforts to ensure that supply chains are conflict free. As noted in Apple's recent supplier sustainability report and a range of other industry efforts, in the process of supply chain due diligence, it is important for companies to ensure that maintaining a conflict-free supply chain does not inadvertently contribute to exclusion of vulnerable populations by further limiting ASM miners' access to markets. Rather, we need to improve our understanding of the ASM sector and its production of 3TG and ensure that it is not only unrelated to conflict, but also that ASM operations improve their sustainability performance in general and continue to be included into the global economy.

There is one important caveat concerning certification schemes, especially in the context of conflict minerals. The ability for a company to claim that its production is "conflict free" represents a significant improvement in how we look at global supply chains and ASM issues in the DRC. It not only shows increased awareness of the predicament of many rural poor people in Africa, but it demonstrates the desire of business to alleviate and prevent conflict.

Moving toward the Sustainable Sourcing of DRC Minerals

The mining of 3TG in the DRC and surrounding region represents an important livelihood strategy to hundreds of thousands of people. But it needs to be carried out in an equitable, safe, and socially and environmentally sustainable manner.

By looking at the current efforts by governments, NGOs, and the private sector to both improve transparency in the sourcing of 3TG in the DRC and enhance the sustainability performance of ASM sites throughout Africa, we can begin to recognize a virtuous relationship between investments in the sustainability of ASM sites and improvements in stable and ethical supply chains.

Conflict is not the sole supply chain concern. Even if the DRC were at peace, many of the human rights and environmental risks associated with mineral sourcing would still exist.

As discussed above, a wide gamut of concerns will very likely persist even in the absence of conflict, which will continue to present challenges for supply chain management. In other words, even if the DRC were to find itself in a situation of prolonged peace and stability, the human rights and environmental risks associated with sourcing these minerals would likely continue until they are systematically addressed. Similarly, business should not examine the ethical standing of 3TG sourcing exclusively in terms of conflict; we should look at the broader socio-economic and human rights conditions of these minerals' production.

The social and environmental concerns associated with the mining of 3TG discussed above represent a risk to company operations—both LSM companies operating in the DRC and surrounding region and companies whose products may use 3TG. In addition to being a robust risk mitigation strategy, by taking supply chain management to a new level through engagement with the ASM sector, businesses have the opportunity to generate local social benefits, such as improved working conditions, improved livelihoods, reduced poverty, and increased community stability. Companies will not only support stable supply chains that offer reduced reputational and regulatory risks, but also create an environment conducive to the creation of significant benefits to local mining communities.

The Business Case for Engagement with ASM

In order to gain a better understanding of the business rationale for going beyond the traceability and transparency of supply chains to actual engagement at the ASM level, BSR interviewed topic experts from industry, civil society, and academia (see Appendix 2). They enthusiastically conveyed that the active involvement of corporate actors in the ASM sector would greatly strengthen the economic and social progress of the Great Lakes region. These interviews also revealed that the companies along the conflict minerals supply chain are not the only ones that have a vested interest in the conditions of ASM sites; companies with business in the region, including multinational mining companies, also stand to benefit from a prosperous ASM sector.

Our interviews revealed that there is not only great interest in continuing to address concerns over conflict minerals, but that efforts would stand to benefit from a more concerted, collaborative action among all stakeholders.

BSR identified two categories of companies who stand to benefit from engagement with the ASM sector:

- » **Companies with current or potential business interests in the region:** Principally, LSM companies operating in the region
- » **Companies making investments in conflict-free sourcing from the DRC and responsible supply chain due diligence:** Companies along the conflict mineral supply chain (CMSC)

The ASM and LSM Relationship

The relationship between LSM companies and the ASM sector is often poorly understood and has been troubled by a general mismatch of expectations, which has led to mistrust and conflict in some cases.²⁰ In the absence of effective engagement, LSM companies can find themselves facing delays in project development or impacts on production as they respond to ASM concerns or actions.²¹

In recent years, LSM companies have sought to work in collaboration with NGOs, international organizations, and governments to improve the conditions of ASM sites. They may attempt to support development of a vibrant ASM sector that functions in harmony alongside other medium- and large-scale mining operations through technological transfer, community engagement projects, and capacity building.

While the motivations for such engagement will certainly vary by site, they are likely to relate broadly to issues, such as risk minimization and security, managing reputational risk, maximization of community development opportunities, pressure for corporate accountability, and maximization of company benefits, such as exploration benefits and improved mine closure planning. The rationale for LSM companies to engage with the ASM sector includes:

- » **Risk minimization and security:** Where LSM and ASM activities occur in close physical proximity, ASM can generate health and safety concerns for LSM companies.²² Proactive engagement with the ASM sector can help mitigate these risks.
- » **Maximizing community development opportunities:** ASM engagement represents an important aspect of a company's community development strategy. Community development is in effect a reciprocal process—by helping communities develop themselves in a sustainable manner, a company is ultimately helping itself.

LSM companies can stand to benefit directly from engagement with ASM in a number of ways. For example, developing a good relationship with ASM miners is often critical to gaining and retaining access to exploration licenses and local social licenses to operate. In addition, involving ASM workers directly in the mine closure process could be an approach that addresses both the issues of the LSM company's legacy and the livelihoods of ASM miners at the same time.

The Nexus of CMSC Companies and ASM

The ASM sector and the CMSC companies (the companies making products that may contain some amount of conflict minerals) are indirectly linked through the 3TG supply chain. As CMSC companies have recently had to respond to changing regulatory environments and are already looking at tracing their supply chains, they are focusing more attention on the origins of their source material. Section 1502 of the U.S. Dodd–Frank Wall Street Reform Act, signed into law in July 2010, requires American companies to conduct due diligence on their mineral supply chains and report on their sources of gold, tin, tungsten, and tantalum to discourage ties to conflict in the DRC.

²⁰ Bryceson and Jønsson, 2013.

²¹ The conflict Barrick Gold experienced related to the North Mara mine in Tanzania provides a case in point. See www.theglobeandmail.com/report-on-business/rob-magazine/barricks-tanzanian-project-tests-ethical-mining-policies/article559188/?page=all.

²² Again, the case of the North Mara mine in Tanzania offers a well-known example within the gold mining community.

CMSC companies must engage with the ASM sector to satisfy the need and desire for comprehensive supply chain due diligence. Such an objective must focus attention on the critical issues at mine sites and not be narrowly confined to identifying financing of violence and insurrection. Moreover, by addressing the fundamental issues related to the production of minerals, CMSC companies have the opportunity to contribute to the improvements in the sector's productivity and efficiency, further reinforcing and stabilizing the supply of these critical materials. As such, the rationale for CMSC companies to engage with the ASM sector includes:

- » **Proactive and efficient supply chain management:** Many downstream companies are implementing systems to trace the use of conflict minerals in their supply chains in response to U.S. regulation, in addition to other efforts related to supply chain social and environmental responsibility. The deplorable working conditions on many ASM sites mining 3TG present an additional significant reputational risk. Companies must play a key role in proactively ensuring that their supply chains are not only conflict free but are also fully ethical. That is, in addition to considering conflict, companies need to incorporate a wider spectrum of issues (including human rights issues, environmental standards, labor conditions, and land use conflict) into their supply chain management systems rather than dealing with them piecemeal.
- » **Ensuring stable material supplies:** ASM is an important source of raw materials that can enhance the stability of global materials prices (taking it off the market because of regulation, conflict, or a simple unwillingness to use certain sources can create price volatility). Supporting stability, good governance, and improvements in environmental and social performance can help increase productivity and efficiency on mine sites and ensure that these supplies remain available.

LSM and CMSC Companies Contribute to an Inclusive Economy

In looking at its potential, it becomes obvious that a well-functioning ASM sector can have significant impact at a local level. Business stands to benefit on multiple levels from engaging in creating a vibrant and prosperous ASM sector. Any engagement, however, needs to take into account the nature and scope of the primary challenges affecting this sector, which are inhibiting it from realizing its full potential.

LSM and CMSC companies have different rationales for engaging with the ASM sector and stand to benefit from this engagement differently. That said, they share a common catalyst for voluntary engagement with the ASM sector.

Unregulated ASM can pose significant reputational risks for CMSC and LSM companies, even in the absence of conflict. Incidents related to child labor, environmental damage, illegal activities, and human rights abuses taking place in the vicinity of LSM concessions often affect a company's corporate reputation if there is a perceived lack of engagement or neglect of the issues. Similarly, the prevalence of such issues in the CMSC supply chain can pose an important reputational risk—as evidenced by the ongoing focus on conflict minerals, supply chain slavery, supplier working conditions, and other issues. Proactive engagement on these issues can deflect potential criticism, can strengthen a company's reputation, and may support a company's case when discussing business with customers or regulation with government representatives.

Approaching conflict minerals supply chain management through engagement with the ASM sector could generate added benefits beyond those accrued to businesses themselves, as discussed above. Engagement with ASM by both CMSC and LSM companies could strengthen the sector, integrate it into the mainstream economy, and provide benefits to society by:

- » Helping miners transform their subsistence practices into sustainable business practices,
- » Improving regional and international cooperation to address the challenges of conflict minerals,
- » Strengthening current certification schemes and making compliance more robust,
- » Enforcing international norms prohibiting child labor,
- » Contributing to the redress of discrimination against women, and
- » Encouraging political support for ASM.

Addressing Child Labor on ASM Sites: An Opportunity for Business Leadership

Companies, particularly those subject to U.S. conflict minerals reporting requirements, are increasingly paying attention to the use of 3TGs from the DRC in their products. As CMSC companies address this issue, they can strengthen their efforts to manage their supply chain by taking a more comprehensive approach to understanding the risks and potential associated with the sourcing of 3TG from the DRC region. ASM miners, whether operating legally, informally, or illegally, are key stakeholders for companies involved in the sourcing of minerals, as well as those with business interests in the region.

This working paper has articulated the challenges of sourcing minerals from a sustainable development perspective by inciting business to adopt a new perspective on supply chain management of minerals sourcing—one that looks beyond the primordial issue of financing insurrection and militia activities to include the wide range of challenges that the sector faces. The rationale behind taking such a comprehensive approach is anchored in the recognition that these challenges are likely to prevail, even in the absence of conflict.

Any long-term strategy toward fair, equitable sourcing of minerals from the DRC needs to reach beyond ensuring traceability to involve a more proactive approach.

Labor conditions at ASM sites are inextricably linked to complex social and economic considerations that are certainly aggravated by, but not necessarily caused by, conflict. More specifically, the motivating factors and context that lead children to work in the mines are embedded in a given region's socioeconomic history and are thus all the more challenging to address. Any long-term strategy toward fair, equitable sourcing of minerals from the DRC needs to reach beyond ensuring traceability to involve a more proactive approach that seeks to address these very issues.

BSR is looking to catalyze business action for the long-term sustainable sourcing of DRC minerals. The ways to engage with scattered informal miners remain elusive, but it is more critical now than ever before to develop a process that is tailored to different conditions and leads to better understanding of the sector's diversity and, ultimately, its organization. To this end, BSR has conducted two in-person workshops in early 2014, bringing together both CMSC and LSM companies to determine a potential collective approach to DRC minerals sourcing "beyond supply chain management." We are developing a collaborative approach to address these critical issues and encourage positive local sustainable development for ASM communities in the DRC.

Specifically, the focus will be on addressing issues of child labor on ASM sites in collaboration with Pact, an international development NGO with extensive experience in mining communities, while jointly developing tools to support supply chain engagement and transparency. As outlined in this paper, child labor presents one of the greatest areas of concern related to the ASM sector and, therefore, to the production of 3TG in the DRC. As mentioned earlier, child labor is one of a few key issues noted in the OECD Due Diligence Guideline for Responsible Sourcing of Minerals, as well as the recent HRW report on ASM in Tanzania.²³ While all social and environmental challenges faced by the ASM sector are important to the ethical production and sourcing of these minerals, addressing the issue of child labor on ASM sites in the Great Lakes region holds great opportunity for companies to have a significant impact on local communities.

²³ The full HRW report can be accessed at:
www.hrw.org/sites/default/files/reports/tanzania0813_ForUpload_0.pdf.

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Appendix 1: An Overview of the ASM Sector

The ASM sector incorporates both formal and informal mining, where informal mining includes miners who operate outside the legal framework of the host country, which is often referred to as “illegal” mining. ASM activities are often conflated with notions of illegality and criminal activity, but while some ASM activities may be illegal, many are formalized and sign licensing agreements with state governments.

ASM activities can be broadly categorized as follows:

- » **Legal:** The legality of ASM activities is determined by government policy and legislation. When ASM activities are considered legal, they are recognized through the provision of ASM mining permits on specifically designated land.
- » **Informal:** This category includes any ASM activity occurring outside the legal framework of the country (also referred to as extralegal activities).²⁴ Illegal mining may still apply a system of recognized property rights (through customary rights or tribal authorities), but the country’s national laws do not recognize these rights.
- » **Illegal:** Illegal ASM is defined as those ASM activities that are undertaken without government accord or that the country’s legislation does not recognize. This category includes ASM activities on a concession where the government has ceded exclusive mining rights to an LSM company, thus necessitating the evacuation (or eviction) of all miners.
- » **Trespassing:** This category encompasses any ASM activity that takes place in a restricted area or on private property without proper permission, including ASM miners who are invading the mine pit of large-scale mines. However, mining concessions granted to large-scale commercial companies often have many ASM communities living on them. These communities should not be considered to be trespassing per se. Rather, the mining company is responsible for collaborating with the government to demarcate restricted areas and communicate about them to ASM miners.
- » **Criminal activity:** ASM is deemed illegal under the laws of the country.

However, there has been some progress over the past decade.²⁵ MMSD tasked governments with the responsibility for monitoring ASM, and some (including those of Ghana, Mongolia, Sierra Leone, and Uganda) have adopted more inclusive policies, increasingly recognizing ASM as a legitimate route out of poverty (Ethiopia is an inspiring case study). Key policy frameworks—for instance, those agreed by the Inter-Governmental Forum on Mining, Minerals, Metals, and Sustainable Development (Mining Policy Framework) and the African Union (Africa Mining Vision)—set priorities for formalizing ASM and improving its social and environmental impacts.

Many governments have recently sought to strengthen their domestic ASM policies (e.g., the governments of Ethiopia, Ghana, and Tanzania), while international agencies and donors are expanding their efforts to help developing countries improve the governance of their extractives sector and its impacts on green growth, poverty reduction, and human rights (e.g., the UN Economic Commission for Africa’s [UNECA] new African Mineral Development Centre). The UN Minamata Convention, agreed to in January 2013, further spurs action, as signatory governments have only three years to develop strategies to reduce mercury use in the ASM gold sector. At the same time, the cessation of the World Bank’s CASM program network

²⁴ See Siegel and Viega, 2009.

²⁵ Buxton, 2012.

activities has left a significant gap at the international level; ASM now lacks an institutional home for key sector actors to share knowledge and learn from each other.²⁶

In addition, portions of many international conventions and codes are relevant to the operation of ASM mines. These codes and conventions often contain principles that would be implemented most effectively by the ASM miners themselves. However, companies working with these miners need to be aware of the context in which they operate. In some cases, the codes apply directly to companies.

Relevant codes and conventions include:

- » The ILO International Programme for the Elimination of Child Labour (IPEC) and the associated ILO No. 182 Worst Forms of Child Labour Convention
- » The Voluntary Principles on Security and Human Rights
- » The UN Global Compact
- » The ILO Declaration on Fundamental Principles and Human Rights at Work

In addition to these broad conventions and codes, a number of mining industry initiatives, performance standards for multinational companies, and industry codes are relevant to the interaction between companies and ASM. While not all of these standards refer specifically to ASM, they all provide guidance on social, environmental, and economic conditions that affect the ASM sector. Table 1 provides an overview of the relevant aspects of these codes and standards.

²⁶ However, an initiative launched recently by the IIEED, which is based on London, seeks to redress this issue by developing an ASM-knowledge program.

Existing Framework / Topics Covered	ASM (specific mention)	Human Rights and Security	Environmental	Health and Safety	Child Labor	Gender	Resettlement and Relocation	Transparency of Payments, Anti-corruption, Good Governance	Community Development and Engagement
Centre for Responsible Jewelry Practices		●	●	●	●	●		●	
EBRD Performance Requirements	●	●	●	●	●	●	●		●
Extractive Industries Transparency Initiative								●	
UN Global Compact		●	●		●			●	
GRI Mining and Metals Supplement	●	●	●	●	●	●	●		●
ICMM Sustainable Development Principles		●	●	●				●	●
IFC Performance Standards	●	●	●	●	●	●	●		●
ILO 182 Worst Forms of Child Labor Convention	●				●				
ILO Declaration on Fundamental Principles and Rights at Work		●			●	●			
International Cyanide Management Code			●	●					
Kimberley Process	●	●							
Millennium Development Goals			●	●		●			
OECD Guidelines for Multinational Corporations		●	●		●	●		●	
Voluntary Principles on Security and Human Rights		●							

Source: Adapted from Wardell Armstrong, 2007.

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Appendix 2: List of Interviewees

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Dr. Sam Spiegel, Lecturer International Development Studies, Center for African Studies, University of Edinburgh

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